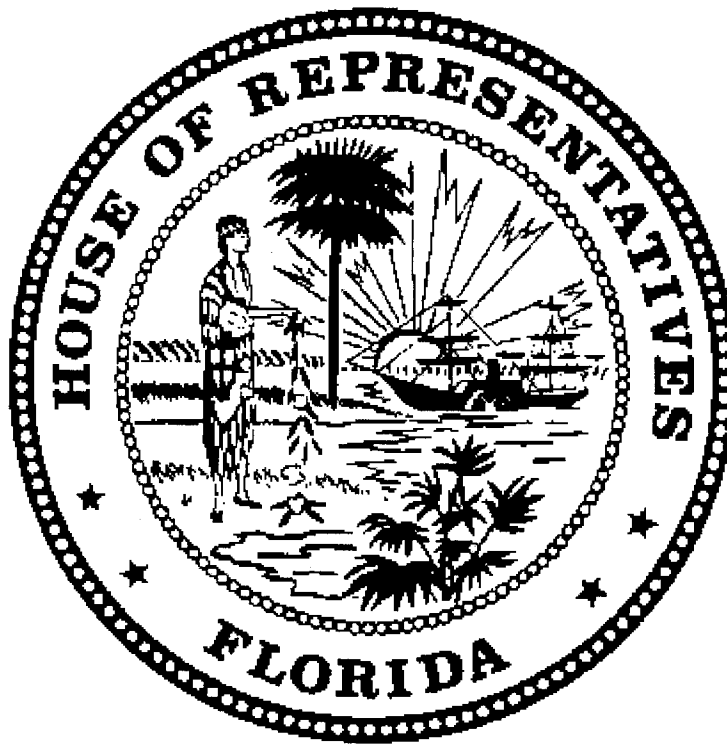


Florida House of Representatives

BURN AUTHORIZATION PROCESS

**Florida Department of Agriculture & Consumer Services'
Division of Forestry**



Committee on Agriculture

January 2006

**Florida House of Representatives
State Resources Council
Agriculture Committee**

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SUMMARY:

The use of prescribed fire is widely recognized as a land management tool that benefits the safety of the public, the environment, and the economy of the state. To attain the prescribed burning goals set forth in law and supported by the Division of Forestry (DOF), landowners, managers, and many citizens of the state, a viable, workable and user-friendly burn authorization process is needed.

A major step toward realization of such a process was creation of the certified burner program that provides more trained burners and reduces liability. However, those seeking to burn have voiced a number of concerns with the existing authorization process. For public and environmental reasons, not all of the complaints can be resolved to the satisfaction of those making them. The DOF recognizes there are improvements to be made, and it should consider some of the suggestions put forth by the burning public. Indeed, the DOF has a list of its own proposed improvements, most of which may be done through internal policy or rule change, to enhance the process.

A policy option for the Legislature is to closely monitor the DOF's consideration and implementation of the proposed open and prescribed burning changes, their own as well as those presented by the burners, and to enact any legislation needed to accomplish those changes.

INTRODUCTION:

Florida law¹ states that the application of prescribed burning is a land management tool that benefits the safety of the public, the environment, and the economy of the state.

Prescribed burning:

- reduces vegetative fuel loads resulting in reduced risk and severity of wildfire;
- is essential to the perpetuation, restoration, and management of many plant and animal communities;
- prepares forestland sites for reforestation, removes undesirable competing vegetation, expedites nutrient cycling, and controls or eliminates certain forest pathogens;
- on rangeland, improves the quality and quantity of herbaceous vegetation necessary for livestock production;
- for management of public lands is essential to maintain the specific resource values for which these lands were acquired.

Following Florida's horrific 1998 wildfire season, the Legislature rewrote chapter 590, F.S., relating to forest protection. Section 590.125, F.S., was created as a central location for previously existing laws relating to open burning authorized by the Florida Department of Agriculture and Consumer Services' Division of Forestry (DOF).

The laws and administrative rules adopted by the DOF have now been in effect for a number of years and concerns have been

¹ Section 590.125(3), F.S.

expressed regarding difficulties encountered by landowners, managers and burners seeking burn authorizations from some of the DOF's 15 regional field offices.

The project's purpose is to identify ways to make the process better and more "user friendly" as a means of accomplishing the ultimate goal of more burning to reduce fuel load and to assist landowners in their land use and management tasks.

BACKGROUND AND HISTORICAL INFORMATION:

Section 590.125, F.S., empowers the DOF to authorize and regulate open burning activities in Florida.

Open burning regulations are contained in laws derived from legislation enacted by the Legislature (s. 590.125, F.S.) and administrative rules (Ch. 51-2, Florida Administrative Code) written to implement the law. Although fire-related regulations are mainly at the state level in Florida, additional rules have been imposed as local ordinances in some counties and cities. Local ordinances may be more restrictive than state and federal rules, but may not conflict with them. It is the responsibility of the burner to be aware of any applicable local regulations regarding burning permits.

Some of Florida's burning regulations are at least 70 years old. An example comes from the early Forestry and Timber Laws of the State of Florida², which stated, *"Whoever sets fire to or burns any wild forests, woods, lands or marshes, except between February 15 and March 31, of each year, or between the said dates without giving two days' previous notice to all persons living within one mile of the place intended to be fired, shall be punished by imprisonment not exceeding sixty days, or by fine not exceeding one hundred dollars."*

Other early laws banned burning at any time in Brevard, Indian River and St. Lucie Counties.³ Another early law allowed burning in Columbia County as long as it was on one's own property and was not allowed to spread elsewhere.⁴

For many years, regulations focused on burning restrictions to prevent human-caused wildfires. The rules have been refined over the years, and are currently summarized for landowners in publications available from the DOF or found on the DOF website.

Under current law, a burn authorization from the DOF is required for any open burning except for yard trash or household paper products. Those items may be burned without authorization only if:

- No local or county ordinance prohibits.
- Fire is started after 9 am and out one hour before sunset.
- The following required set-backs are met:
 1. 25 feet from forested areas,
 2. 100 feet from public roads (50 feet in rural areas),
 3. 50 feet from the owner's house,
 4. 300 feet from other occupied buildings (100 feet in rural areas)
- Fire is enclosed in barrel or pit with wire mesh cover.
- Fire is attended at all times.⁵

Prescribed burning, which requires a burn authorization from the DOF, is defined as the controlled application of fire in accordance with a written prescription for vegetative fuels under specified environmental conditions while following appropriate precautionary measures that

³ Laws of 1927

⁴ Special Act of 1929

⁵ Chapter 62-275, Florida Administrative Code

² Florida Forest Service Bulletin No. 10, March, 1934

ensure that the fire is confined to a predetermined area to accomplish the planned fire or land-management objectives.⁶ It is a precise tool for vegetation management that requires permits, proper training, care, caution and control. Prescribed burning is an important tool available to landowners and natural resource managers for maintaining healthy forests and range lands.

The 1970 Federal Clean Air Act resulted in the establishment of specific air quality standards and the provision that each state meet those standards through individual State Implementation Plans. A number of new burning regulations and rules in Florida in the last 30 years represent the state's response to the Clean Air Act, ensuring that smoke from prescribed burns will not affect compliance with air quality standards.⁷

As the use of prescribed burning expanded throughout the Southeast in the last 40 to 50 years, the incidence of smoke-related accidents on highways and smoke intrusions in urban and metropolitan areas grew. Liability issues became a by-product of these events. By the late 1980s, prescribed burning was often curtailed because of the substantial risks of some type of litigation, increased urbanization, and changes to agricultural and forestry practices.

The 1990 Legislature passed the Florida Prescribed Burning Act⁸ defining important standards for prescribed burning and reducing the liability for burners who were properly certified and abided by the new and existing regulations.

In 1998, a horrific fire season demonstrated the need to promote and protect prescribed burning across the state, as well as to

increase cooperation among the diverse agencies involved in fire suppression and prevention. With those objectives, the 1999 Legislature enacted legislation combining and revising all previous statutes related to prescribed burning and fire control. Accompanying DOF rules in the Florida Administrative Code were similarly updated and revised with some of the most important changes focusing on:

- increased attention to fuel reduction in interface and other wildland areas,
- increased public education about fire and prescribed burning,
- much greater liability protection for certified burners, and
- expanded burn permit conditions.⁹

To comply with the 1999 statute changes, Chapter 5I-2, Florida Administrative Code, was revised to include the following:

1. Daytime burning authorizations are issued for 9:00 a.m. (8:00 a.m. CT) to one hour before sunset for noncertified burners and to one hour after sunset for certified burners.
2. Nighttime authorizations are issued for one hour before sunset to 9:00 a.m., under dispersion indices of 8 or higher and 6 or higher for noncertified and certified burners, respectively.
3. Certified burners must present their certification number at the time of their permit request, and they must have a copy of the prescription on site for inspection.
4. Minimum requirements for the prescription include: stand, site and fuel description; map of the area to be burned; personnel and equipment to be used; desired weather factors; desired fire behavior; ignition technique; time and date the prescription was prepared; authorization date and time period;

⁶ Section 590.125, F.S.

⁷ FOR 67, *Prescribed Burning Regulations in Florida*, Institute of Food and Agricultural Sciences, University of Florida. April 2002

⁸ Section 590.026, F.S. (1990)

⁹ Chapter 99-292, Laws of Florida

an evaluation and approval of the anticipated impact of the proposed burn on smoke-sensitive areas; and signature and number of the certified burn manager. (Prescriptions are not required for fires managed by non-certified burners, but are highly recommended for planning and control purposes).

5. Piles or windrows must be at least 100 feet from paved, public highways; they can have no visible flame one hour before sunset or thereafter; and wind direction must carry smoke from them away from public roads.
6. Open burning is not allowed:
 - when the fire may pose a threat to public health, safety, and property protection;
 - in smoke-sensitive areas between one hour before sunset and 9:00 a.m.;
 - when visibility on public roads would be reduced to less than 1,000 feet;
 - if it reduces visibility at a public airport;
 - during air quality or stagnation advisories.

CURRENT SITUATION:

The DOF, through its Forest Protection Bureau, oversees one of the most active prescribed fire programs in the country. In an average year, 113,000 burn authorizations are issued allowing people and agencies to prescribe burn their land. An average of almost 2 million acres is treated with prescribed fire each year.¹⁰

For burns relating to agriculture, silviculture, and rural land clearing, an authorization must be obtained from the DOF on the same day the burn is to take place or after 4:00 p.m. on the previous day. To protect public safety, the DOF may set

special requirements for authorizations including, but not limited to, on site inspections. Any authorized burn that goes out of compliance will be allowed a maximum of two hours to be brought into compliance by the person responsible. In the event that the DOF determines that there is a threat to life, public safety or property immediate suppression action will be taken.

Daytime burning authorizations are issued for the burning to be conducted from 9:00 a.m. (8:00 a.m. CT) to one hour before sunset for noncertified burners and to one hour after sunset for certified burners.

Burning in a manner that violates any of these requirements is a second-degree misdemeanor.

Certification: A "certified prescribed burn manager" is an individual who successfully completes the DOF certification program and possesses a valid certification number.

Certified prescribed fires have the following additional requirements:¹¹

1. A written prescription must be prepared before a burning authorization is received from the DOF.
2. A certified prescribed burn manager must be on site with a copy of the written prescription from ignition of the burn to its completion.

A certified prescribed fire that meets all the requirements described in s. 590.125, F.S., is considered to be in the public interest and a right of the property owner. Pursuant to the 1999 legislation, "a property owner or his or her agent is neither liable for damage or injury caused by the fire or resulting smoke ...for (certified) burns conducted in accordance with this subsection unless gross negligence is proven." The "gross negligence" condition provides substantially

¹⁰ Florida Division of Forestry website

¹¹ Section 590.125, F.S.

more protection to landowners and certified burners than under previous law. A certified burner who violates any of the requirements commits a second-degree misdemeanor.

Whether or not prescribed burners have been certified by the DOF, **all prescribed fires must¹²**:

1. Be authorized or permitted by the local DOF office, or its designated agent, before the fire is ignited. The permit must be in writing if the burn area is within an area of severe drought emergency.¹³
2. Have adequate fire breaks around the planned burn area, and sufficient personnel and firefighting equipment for controlling the fire must be on site.
3. Remain within the boundary of the authorized area.
4. Have someone present at the burn site until the fire is extinguished (which is defined as no spreading flame).
5. Have the specific consent of the landowner or his or her designee.

Burn authorization process: According to the DOF, several criteria are considered before allowing or denying a burn authorization. Included are:

1. Weather
 - Wind speed
 - KBDI (Keetch-Byram Drought Index)
 - Relative humidity
 - Dispersion index (the process by which the atmosphere mixes and transports particulates, such as smoke, away from their source.)
 - Red flag conditions (used to alert fire and other emergency response personnel and land managers that a serious wildfire potential exists

based on weather conditions, moisture levels of vegetative fuels and availability of fire suppression resources)¹⁴

2. Fire occurrence
 - Number of new starts
 - Number of active fires
 - Number of recent escaped burns (by the requester of the authorization)
3. Personnel and equipment availability
4. Type of burn to be done – acreage versus pile burn

The DOF issues a burning authorization or permit once it is determined that these conditions are favorable for safe burning. Authorizations can be cancelled by the DOF if those conditions change. Based on the level of these criteria, the DOF may require burners to have fire control and suppression equipment on site.

According to the DOF, the diversity of fuel types in Florida does not allow a “one size fits all” determination regarding open burning. On marginal days, the DOF may conduct on site inspections to determine if burning can be done safely under that day’s weather conditions.

To obtain a burn authorization, a prospective burner must call the DOF district office in the area where the burn is to take place. Information to be provided by the burner includes:

- Name
- Address
- Telephone number
- Section, township and range of the burn area
- A description of what is to be burned (land-clearing debris, range land, numbers of acres and/or piles, etc.)

¹² Section 590.125, F.S.

¹³ Section 590.081, F.S.

¹⁴ Florida Division of Forestry website

- Equipment on hand to contain the fire

For established or frequent burners, the DOF will ask if the burn is a continuation or reissue of a previous burn. If so, the previous authorization number can be pulled up, though the information must be verified.

5. Smoke sensitive areas: If the requested burn area is in a smoke sensitive area, the DOF must do an on-site inspection before the burn is conducted.

The existing DOF open-burning authorization system uses dedicated computer terminals connected to a mainframe computer (in Tallahassee) to provide personnel in each district with the ability to enter and view information for open-burning authorizations stored in a central database. Currently, smoke-sensitive areas are designated in the database as sections from the Public Land Survey (Section, Township and Range) where a smoke-sensitive feature, such as a hospital or airport, exists. The sections are flagged in the database to prompt special considerations for any burning authorizations issued for the entire section. There are several drawbacks to this approach:

- the exact location of the smoke-sensitive feature within the section is not known;
- the effects of smoke from an adjacent, non-flagged section are not considered; and
- the weather conditions, such as wind direction and dispersion index, are not taken into consideration.

In addition, district personnel, in the past, have had little indication of the level and

spatial distribution of burning activity across a district on a given day.¹⁵

To address some of these drawbacks a new *Enhanced Open Burning Authorization and Wildfire Suppression System* has been developed by the DOF for GIS-based open-burning authorization and computer-assisted dispatch. This system is designed around a client-server computer network linking the central UNIX server in Tallahassee to remote client PCs at each district office via the Internet. The central server maintains a database for open-burning authorizations, wildfire incidence reports, as well as the daily fire weather forecast and fire behavior data from the previously discussed components. Each remote client PC runs a software application consisting of two decision support modules:

1. a module for issuing open-burning authorizations, which incorporates GIS, spot weather forecasting and smoke dispersion modeling to determine the potential effects of a proposed burn before a permit is issued;
2. a module designed to compile and disseminate information for timely and efficient allocation of available resources to suppress wildfires.¹⁶

Response to wildfire incidents is based primarily on the experience of the district personnel. Fire suppression resources are mobilized and managed using a magnetic wall map to indicate their location as well as incidents of wildfires in the district. In both cases, information on location of authorized burns, wildfires, and available suppression resources across district boundaries is inadequate. The use of a GIS-based approach to issuing open-burning

¹⁵ Brenner, Arvanitis, Brackett, Lee, Carr, and Suddaby: *Integrating GIS, Meso-Scale Fire Weather Prediction, Smoke Plume Dispersion Modeling, and the Internet for Enhanced Open Burning Authorizations and Wildfire Response in Florida*.

¹⁶ Ibid.

authorizations and dispatching wildfire suppression resources has been identified as a means of overcoming the limitations of the current system.¹⁷

The following information is a summary of burning authorizations issued by the DOF for the past three years.

2002-2003

Authorization requests received	134,685
Authorizations denied	997
Authorizations granted	133,688
Percent granted	99.26%

2003-2004

Authorization requests received	124,733
Authorizations denied	1,156
Authorizations granted	123,577
Percent granted	99.07%

2004-2005

Authorization requests received	185,690
Authorizations denied	2,157
Authorizations granted	183,533
Percent granted	99.84%

Appendix A provides further detail as to burn type, acreage, and number of piles.

Authorization denials: Per the DOF, the reasons for denying a request for an Open Burn Authorization (OBA) are numerous and varied. They are recorded in a database according to the following categories.

Area restrictions – 45% of all denials fall into this category. The category includes items such as not meeting the required setbacks, inadequate equipment on site, and inappropriate weather conditions on the particular day.

Customer-specific restrictions – 17% of all denials are in this group, which includes certain conditions when a specific customer should not burn. This is often due to wind direction restrictions for that customer. For

example, if the property to be burned is adjacent to I-10 on the north side, the burn can only be done when there is a southerly wind.

Unknown – These denials do not have an explanation in the database and account for 14% of all denials.

Other – 10% of denials fall into this category as the reasons for denial do not easily fit into any other categories.

Customer restrictions – These denials are generally burns that were called off by the customer for various reasons (weather changed, personnel did not show up, etc.). Such denials make up 8% of all denials.

Smoke sensitive – 7% of burns were denied because they failed the smoke screen test. When an authorization is requested, the size and location of the burn are entered into a computer program that takes that information plus the day's predicted weather and determines the possibility of impacting a smoke sensitive area. If the smoke plume impacts such an area, the authorization is denied.

Appendix B depicts the open burn authorization denials by region, type and fiscal year.

Night-time burning: Interviews with persons who frequently conduct prescribed burns revealed a desire to do more nighttime burning. According to the DOF, broadcast prescribed burns may be conducted at night providing certain weather parameters are in place. After 2:00 p.m. each day, district DOF personnel can provide information as to whether the nighttime dispersion index is high enough to allow for burning.

The DOF authorizes burns for non-certified prescribed burners if the dispersion index is at 8 or above. Burns are allowed from one hour before sunset until 9:00 a.m. the next day. Fire may be ignited until midnight, at

¹⁷ Ibid.

which time no new fire may be started. The fire may continue to burn and spread until the next morning. If more time is required to complete the burn, a daytime authorization is required.

For certified prescribed burners, the dispersion must be at 6 or above. In specially designated areas, some districts authorize night burns by certified burners when the dispersion index is 3 or above. A map depicting areas of the state where the special nighttime burning is allowed is posted on the DOF website.¹⁸ Other parameters are the same as for non-certified burners.

Other states:

Alabama – A burning permit, 9-13-11 of the 1975 Code of Alabama, is required for all forestry and agricultural burns. In general, the permit means the burner has the manpower and equipment to control the fire and agrees to stay with the fire until it is out. Burning permits may be obtained by calling the Alabama Forestry Commission (AFC). Even though the burner has a permit, he/she is still responsible for any damage to others that may be caused by the fire or smoke. Alabama has a Certified Burner Law designed to reduce burner liability.

Even though the law requires a permit for all "wood & field" fires, the AFC has administratively exempted fires smaller than 1/4 acre if it is more than 25 feet from a forested area. However, the burner is still responsible for the fire.

Upon requesting a permit, the burner will be asked about the burn. The approximate size will be needed along with what is to be burned, i.e. grassland/fields/forests, and the general purpose of the burn such as fire hazard reduction, regeneration, wildfire benefit, etc. The burn must not contain

material such as vehicle tires, construction material, household garbage or other material prohibited by the Alabama Department of Environmental Management.

Some county and city regulations also restrict outdoor burning. Burners are responsible for contacting their local government for additional information.

A burn permit may be canceled by the AFC for failure to comply with the terms of the permit, weather condition changes which cause erratic and dangerous fire behavior, or if the burn produces smoke which becomes a hazard to others or contributes to a degradation of air quality.¹⁹

Georgia – The Georgia Forestry Commission has an online permit system that allows an applicant to apply for a daily permit or an annual permit. From the web page, a person can obtain a burning permit for yard debris type burns such as leaf piles and small limb piles (approximately 6' x 6' or smaller). Fires are not to be initiated before 8:00 am and should be completely extinguished before dark. In highly populated areas, burning should be conducted from 10:00am until 30 minutes before dark. For large brush piles or acreage burns, the prospective burner must contact the local county office of the Georgia Forestry Commission.²⁰

CONCERNS RAISED BY INTERESTED PARTIES:

Interviews and conversations with landowners, land managers, ranchers and burners (certified and non-certified) throughout the state revealed a number of concerns with the DOF burn authorization process. Summarized below, in no particular order, are the most often heard complaints:

¹⁸ <http://flame.fl-dof.com/ENV/night.html>

¹⁹ www.forestry.state.al.us

²⁰ www.gfc.state.ga.us/OnlinePermits/

- The number of prescribed burns seems to have decreased over the past couple of years.
- Inconsistencies between districts – authorization may be issued in one district, but not just over the district line; problems encountered when burn area falls into more than one district.
- Professional (certified) burners get lumped in with everyone else (smaller, less experienced burners).
- Difficulty obtaining an authorization for a night burn. When weather conditions are good, and a day burn is not completed, allow it to continue into the night. It is difficult to always have fire out by 5:00 p.m.
- Lack of communication between DOF headquarters and the districts; also, poor communication between districts.
- Shortage of burn time – by the time authorization is obtained, valuable burn time is lost. Earlier start time is needed. Multiple-day permits would help.
- Disconnect between what DOF says and what they do, e.g., DOF promotes the need for more prescribed burns, but getting an authorization to do it is difficult.
- DOF needs a tiered certification system based on the burner's experience, equipment, training, etc.
- Need more public education about the benefits of prescribed fire.
- Quit apologizing for smoke and inconvenience . . . it is necessary if fuel reduction is to be achieved.
- Review the decertification process.²¹
- Consider the location and surrounding area when requiring a burner to have suppression equipment on site. Some sites are surrounded by water, dikes, or roads.
- Lack of understanding by DOF of the difference between a large ranch and a small brush pile in an urban setting

- District phone lines are often busy or computers go down; takes a long time to get an authorization; need more staffing, especially on weekends.
- Computer system for input of permit information is very time consuming.
- When bans or denials are issued, need to have reasons the public can understand, not just generalities or liability; need valid information
- DOF has some great people; need to “loosen the reins and let them do their job”.

DOF COMPLAINT PROCESS:

Currently, the DOF handles complaints regarding the burn authorization process by having the local Forest Area Supervisor or District Manager contact the person registering the complaint. If either of those DOF personnel cannot handle the complaint satisfactorily, it goes to the Deputy Chief of Field Operations. If the complaint is still unresolved, the Chief of Field Operations and/or the Chief of Forest Protection intervene to bring closure to the complaint.

CONCLUSIONS:

To attain the prescribed burning goals set forth in law and supported by the DOF, landowners, managers, and many citizens of the state, a viable, workable and user-friendly burn authorization process is needed.

A major step was creation of the certified burner program which provides more trained burners and reduces liability. However, there are more improvements to be made. The burners are voicing concerns, and though not all can be easily resolved, the DOF should consider the suggestions put forth.

In looking for ways to improve the prescribed burn and burn authorization program, the DOF has submitted the

²¹ www.fl-dof.com/wildfire/wf_pdfs/CBMpoints.pdf.

following list of proposed alternatives and/or enhancements.

- Develop a web-based authorization system for public use (estimated 12 months to get programmed and tested).
- Increase uniformity across the state for prescribed fire authorizations by developing consistent guidelines, such as for equipment requirements.
- Hire fulltime person to be district fire coordinator to focus only on fire and set prescribed fire guidelines.
- Disseminate authorization procedures and guidelines to the public on a regular basis.
- Develop district lists of burners and their equipment; allow them to burn in more restrictive times.
- Develop a pile burner certification, similar to the certified burner program, to assist pile burners in completing burns (possibly earlier start time and later out time).
- Establish a working group from the prescribed fire councils to discuss open burning and see how DOF can provide better service while fulfilling its role as open burning regulator.
- Prepare a guiding agenda for DOF to use in conducting public meetings in every district to provide open burning law and rule information and to obtain comments from burners and non-burners on how effectively the DOF deals with their issues.
- Prepare and release an article on the open burning program for publication in magazines of associations representing burners in the state.
- Install the capability to provide a voice message, for callers placed on hold, which advises the authorizations process for the day and provides weather and other information related to prescribed burning for the day.
- Consider development of guidelines allowing for short term authorizations for selected types of burning based on

fuels, size, prior site inspection, burner's history, etc., on days that full day authorizations would not be issued.

A policy option for the Legislature is to closely monitor the DOF's consideration and implementation of the proposed open and prescribed burning changes, their own as well as those presented by the burners, and to enact any legislation needed to accomplish those changes.

Appendix A

BURNING AUTHORIZATIONS SUMMARY

Statewide Summary

7/1/2003 through 6/30/2004

Burn Type	Authorized Fires	Authorized Acres	Authorized Piles
Agricultural – Pasture	41905	536396	63254
Agricultural – Range Management	2334	58366	4080
Agricultural – Stubble (post harvest)	2145	7245	5890
Agricultural – Sugarcane	66	84	372
Agriculture – Citrus	16245	270	30534
Land clearing—non-residential – with ACI*	4139	90	5374
Land clearing—non-residential – without ACI	21248	2812	47521
Land clearing – residential—with ACI	2194	169	3143
Land clearing – residential—without ACI	25698	1787	40603
Silvicultural	68	3815	79
Silvicultural	1091	269192	396
Silvicultural	4746	809137	2006
Silvicultural	0	0	0
Silvicultural	106	4004	119
Silvicultural	1124	43403	2506
Silvicultural	468	135071	179
Total	123577	1871841	206056

Appendix A (cont'd)

BURNING AUTHORIZATIONS SUMMARY

Statewide Summary

7/1/2002 through 6/30/2003

Burn Type	Authorized Fires	Authorized Acres	Authorized Piles
Agricultural – Pasture**	66202	925320	5564
Agricultural – Range Management	57	365	70
Agricultural – Stubble (post harvest)	198	3776	20
Agricultural – Sugarcane	34	6	67
Agriculture – Citrus	0	0	0
Land clearing—non-residential – with ACI	0	0	0
Land clearing—non-residential – without ACI	4995	1493	12402
Land clearing – residential—with ACI	0	0	0
Land clearing – residential—without ACI	53821	43621	11579
Silvicultural	156	2241	28
Silvicultural	252	35242	4
Silvicultural	5346	922651	611
Silvicultural	716	132276	183
Silvicultural	37	2977	0
Silvicultural	1324	44033	1625
Silvicultural	550	200537	31
Total	133688	2314538	32184

*Air Curtain Incinerator

**Agricultural and Land Clearing information prior to July 1, 2003 was not categorized in the detail that it is here.

Open Burn Authorization Denials by Region, Type, and Fiscal Year

Burn Type	2002-03	2003-04	2004-05	Total
<i>Region 1</i>				
Agricultural – Pasture	20	13	52	85
Agricultural – Range management	1	3	2	6
Agricultural – Stubble (post harvest)		1	3	4
Land clearing – non-residential – with ACI			3	3
Land clearing – non-residential – without ACI	26	20	30	76
Land clearing – residential – with ACI		1	3	4
Land clearing – residential – without ACI	46	45	50	141
Silvicultural – Ecological	4	2	1	7
Silvicultural – Hazard removal	38	7	16	61
Silvicultural – Prior to seed			1	1
Silvicultural – Site preparation	9		3	12
Silvicultural -- Wildlife	1			1
Summary for Region 1	145	92	164	401
<i>Region 2</i>				
Agricultural – Pasture	11	271	231	513
Agricultural – Stubble (post harvest)	1			1
Land clearing – non-residential – with ACI		2	9	11
Land clearing – non-residential – without ACI	9	183	110	302
Land clearing – residential – with ACI		2	3	5
Land clearing – residential – without ACI	21	81	103	205
Silvicultural – Ecological			1	1
Silvicultural – Hazard removal	6	11	15	32
Silvicultural – Prior to seed		2		2
Silvicultural – Site preparation	2	5	2	9
Summary for Region 2	50	557	474	1,081

Appendix B (cont'd)

Burn Type	2002-03	2003-04	2004-05	Total
<i>Region 3</i>				
Agricultural – Pasture	154	108	203	465
Agricultural – Range management			1	1
Agricultural – Stubble (post harvest)		2	10	12
Agriculture – Citrus		25	35	60
Land clearing – non-residential – with ACI		18	63	81
Land clearing – non-residential – without ACI		74	221	295
Land clearing – residential – with ACI		45	28	73
Land clearing – residential – without ACI	450	79	219	748
Silvicultural – Disease control	1			1
Silvicultural – Ecological		7		7
Silvicultural – Hazard removal	16	7	3	26
Silvicultural – Other	8			8
Silvicultural – Prior to seed		1		1
Silvicultural – Site preparation	2			2
Silvicultural -- Wildlife		1		1
Summary for Region 3	631	367	783	1,781
<i>Region 4</i>				
Agricultural – Pasture	113	38	49	200
Agricultural – Range management		11	4	15
Agricultural – Stubble (post harvest)		3	2	5
Agricultural – Sugarcane			602	602
Agricultural – Citrus		32	11	43
Land clearing – non-residential – with ACI		4	3	7
Land clearing – non-residential – without ACI		33	35	68
Land clearing – residential – with ACI			2	2
Land clearing – residential – without ACI	27	16	26	69
Silvicultural – Ecological			1	1
Silvicultural – Hazard removal	3	2	1	6
Silvicultural – Other	4			4
Silvicultural – Site preparation	3	1		4
Silvicultural – Wildlife	1			1
Summary for Region 4	151	140	736	1,027
Grand Totals	1,803	2,312	4,314	8,580

